

**WHAT IS CLAIMED IS:**

(1) A detection system for use within a vehicle of the type having a trunk which is selectively movable between an open and a closed position, said detection system  
5 being adapted to detect the presence of a breathing individual within said trunk, said detection system comprising:

a breathing detector which is disposed within said trunk, which is adapted to detect the breathing of said  
10 individual, and which generates a signal upon the detection of said breathing; and

a controller assembly which is communicatively coupled to said breathing detector, which receives said signal, and which opens said trunk upon receipt of said  
15 signal.

(2) The detection system of claim 1 wherein carbon dioxide is emitted by said individual as said individual breathes and wherein said breathing detector detects the presence of said carbon dioxide within said trunk.

(3) The detection system of claim 1 wherein said vehicle  
20 is of the further type which includes an ignition switch which may be selectively moved to a certain position and wherein said controller assembly is coupled to said ignition switch, senses said placement of said ignition  
25 switch in said certain position, and causes said trunk to be opened in response to said signal from said breathing

detector only if said ignition switch is placed in said certain position.

(4) The detection system of Claim 1 wherein said vehicle is of the type which is selectively driven and wherein  
5 said controller assembly prevents said trunk from being open when said vehicle is driven.

(5) The detection system of Claim 1 further including an illuminated touch sensitive pad which is disposed within said trunk, which is coupled to said controller assembly,  
10 and which selectively communicates a second signal to said controller assembly upon being touched.

(6) The detection system of Claim 5 wherein said controller assembly, upon receipt of said second signal, opens said trunk.

(7) The detection system of Claim 2 wherein said  
15 breathing detector measures the amount of carbon dioxide which is resident within said trunk, stores a certain value, compares said measured amount of carbon dioxide to said certain value, and generates said signal only if  
20 said measured amount of said carbon dioxide is greater than said certain value.

(8) The detection system of Claim 1 wherein said controller assembly further includes a timer which allows said detection system to be operable for a certain period  
25 of time.

(9) The detection system of Claim 5 wherein said touch sensitive pad comprises an illuminated capacitance sensing pad.

(10) The detection system of Claim 1 wherein said individual comprises a child.

(11) The detection system of Claim 1 further comprising a camera which is mounted within said trunk and which is coupled to said controller assembly.

(12) An assembly for detecting the presence of an individual within a trunk of a vehicle, said assembly comprising:

a sensor which is mounted within said trunk and which detects the occurrence of at least one bodily function of said individual; and

a controller assembly which is communicatively coupled to said sensor and which provides a signal when said sensor detects the occurrence of at least one bodily function of said individual.

(13) The assembly of Claim 12 wherein said at least one bodily function comprises breathing.

(14) The assembly of Claim 12 wherein said vehicle is of the further type which includes a selectively energizable horn and wherein said signal is coupled to said horn, effective to energize said horn and to provide said warning signal.

(15) The assembly of Claim 14 wherein said controller assembly further opens said trunk when said signal is generated.

(16) The assembly of Claim 13 wherein said sensor  
5 comprises a carbon-dioxide sensor.

(17) The assembly of Claim 15 further comprising a switch which selectively causes said controller assembly to be inoperable.

<sup>12</sup> ~~(18)~~ A method for detecting the presence of a child  
10 within a trunk of a vehicle, said method comprising the steps of:

measuring an amount of carbon-dioxide within said trunk of said vehicle; and

using said measured amount of carbon dioxide to  
15 determine the presence of said child within said trunk of said vehicle.

<sup>13</sup> ~~(19)~~ The method of Claim <sup>12</sup> ~~18~~ further comprising the steps of:

providing a voice detection module within said  
20 trunk; and

using said voice detection module to sense the presence of said child within said trunk.

<sup>14</sup> ~~(20)~~ The method of Claim <sup>13</sup> ~~19~~ further comprising the step  
25 of detecting said presence of said child only when said vehicle is stationary.

add a1